

IN THE CLAIMS

Claims 1-5 (cancelled)

Claim 6. (Currently Amended) A semiconductor device comprising:

a semiconductor substrate having first and second main surfaces, having a semiconductor element in the first main surface, and having a peripheral surface contacting the first and second main surfaces;

a heat radiation layer on the second main surface of the semiconductor substrate; and
a flange including a plurality of metal layers disposed on the peripheral surface of the substrate, the metal layers comprising:

a first metal layer having a surface layer containing palladium on a side toward the first main surface;

a second metal layer of a nickel-based alloy ~~disposed on~~ contacting the surface layer containing palladium of the first metal layer, the second metal layer having a ~~top~~ topmost portion located below and spaced from the first main surface; and

a third metal layer disposed under the first metal layer.

Claim 7. (Previously Amended) The semiconductor device according to claim 6, wherein the third metal layer comprises a nickel-based alloy layer, a gold layer, and a laser-cut metal layer including one of a nickel layer and a chromium layer.

Claim 8. (Previously Amended) The semiconductor device according to claim 7, wherein the third metal layer is selected from the group consisting of a single layer of gold, and a plurality of layers including a titanium layer and a gold layer, on the laser-cut metal layer.

Claim 9. (Previously Amended) The semiconductor device according to claim 6, wherein the first metal layer comprises one selected from the group consisting of a palladium layer and a titanium layer under the palladium layer, and a single layer.

In re Appln. of KOSAKI et al.
Application No. 09/986,325

Claim 10. (Previously Amended) The semiconductor device according to claim 6, wherein the second metal layer is selected from the group consisting of Ni-P alloy, Ni-B alloy, and Ni-B-W alloy.